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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,886	06/26/2001	Pingnan Shi	78508 (38-155 US)	2419
27975	7590	06/29/2006	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791			SHEPARD, JUSTIN E	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/891,886

Applicant(s)

SHI ET AL.

Examiner

Justin E. Shepard

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-10 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments filed 3/17/06 have been fully considered but they are not persuasive.

Page 9, paragraph 5 (referring to claim 1):

The applicant argues that Emsley discloses a system that only tunes to one of the European or American standards. While this is correct, the claim limitation is that the invention has a plurality of signal conditioning circuits. Emsley discloses a system with two band pass filters, one for the main television signal and the other for a signal with a 10.7 Mhz center frequency (page 2, paragraph 24, lines 1-10). This meets the claim limitation, and the rejection stands.

Page 10, paragraph 2 (referring to claim 1):

The applicant argues the point found in the argument above, wherein one signal is broadband while the other is narrowband. This limitation is not found in the claim and therefore will not be addressed.

Page 12 (referring to claim 1):

The arguments are moot in view of new grounds of rejection.

Page 13, paragraph 3 (referring to claim 16):

The arguments are moot in view of new grounds of rejection.

Page 13, paragraph 4 (referring to claim 3):

The applicant argues the point found in the argument above, wherein one signal is broadband while the other is narrowband. This limitation is not found in the claim and therefore will not be addressed.

Page 14, paragraph 4 (referring to claim 4):

The arguments are moot in view of new grounds of rejection.

Page 14, paragraph 5 (referring to claim 8):

The arguments are moot in view of new grounds of rejection.

Page 16, paragraph 2 (referring to claim 9):

The applicant argues that because the rejection of claim is not valid, that dependent claim 9 would be allowable. As the rejection of claim 1 is valid, the rejection of claim 9 is also valid.

Page 17, paragraph 4 (referring to claim 2):

The applicant argues that Lui does not disclose the details of how the receiver would be constructed. As Emsley discloses the details of a system that could perform demodulation of either the European or American digital standards, Lui is only needed to teach a system that could perform both in one system, which it does. Therefore the combination and rejection are valid.

Page 19, first paragraph (referring to claim 6):

The arguments are moot in view of new grounds of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 8-10, 12-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emsley in view of Schmindt.

Referring to claim 1, Emsley discloses a test meter for a digital signal distribution system comprising:

a front end operative to acquire a digital signal carried by the digital signal distribution system (figure 1, part 38; page 2, column 1, lines 2-6);

signal conditioning circuitry having a plurality of signal conditioning circuits (page 2, paragraph 24, lines 1-9), each signal conditioning circuit corresponding to one digital standard in a plurality of digital standards (figure 2, parts 86 and 88; page 2, paragraph 24, lines 1-9), the signal conditioning circuitry being in communication with said front end so as to receive the acquired digital signal and operative to apply the acquired digital signal to the signal conditioning circuit in the plurality of signal conditioning circuits that corresponds to the digital standard for the acquired digital signal in the

plurality of digital standards (figure 1, part 38; figure 2, part 38; page 2, paragraph 22, lines 1-3; page 2, paragraph 24, lines 1-9);

a digital demodulator in communication with said signal conditioning circuitry and operative to select one demodulation scheme from a plurality of digital demodulation decoding schemes to obtain a demodulated signal from the acquired digital signal after signal conditioning (page 5, paragraph 50, lines 1-2; page 4, column 2, lines 23-33).

Emsley does not disclose a system using a user interface operative to allow a user to select the digital signal.

Schmidt discloses a system using a user interface operative to allow a user to select the digital signal (column 5, lines 63-67).

Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the modified system of *Emsley* with the system of *Schmidt* in order to supply a control panel in which the user could select a specific passband, thereby providing a system useful in diagnostic testing/monitoring of various cable systems.

Claim 10 and 16 are encompassed within Claim 1. Thus, it is analyzed and rejected as previously discussed.

As to claim 3, *Emsley* further teaches the system contains a multiple filters. (Par. [0024]). Moreover, in light of the rejection of Claim 1, it would be inherent that such a system contain filters which correspond to the various digital standards. Accordingly, the modified system of *Emsley et al* disclose every limitation of Claim 3.

Claims 12 and 13 correspond to Claim 3. Thus, each is analyzed and rejected as previously discussed.

Claim 9 recites the test meter of claim 8, wherein the various digital demodulation decoding schemes comprises QAM and QAM variants. As discussed above, the modified system of *Emsley et al* disclose all limitations of claim 8, and *Emsley* further discloses the use of any number of QAM schemes. (Par. [0050]). Accordingly, the modified system of *Emsley* contains all limitations of claim 9.

Claims 15 and 18 correspond to Claim 9. Thus, each is analyzed and rejected as previously discussed.

Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Emsley* in view of Schmidt as applied to claims 1 and 16 above, and further in view of Liu.

Claim 2 recites the test meter of claim 1, wherein the plurality of digital standards comprise ITU-T J.83 Annex A, Annex B, and Annex C and the various digital demodulation decoding schemes comprise QAM and QAM variants. As discussed above *Emsley et al* disclose all limitations of claim 1, and further teach the system is capable of filtering signals with passband widths of 6 MHz (i.e., Annex B) and 8 MHz (i.e., Annex A). (Par [0024]). *Emsley* further teaches the digital demodulation technique can be any number of modulation techniques, including QAM protocols (i.e. QAM and QAM variants). (Par. [0050]). But, *Emsley* fails to specifically recite the remaining



limitation of claim 2. However, within the same field of endeavor, *Liu et al* disclose a similar system which is capable of demodulating signals that have been transmitted according to a variety of protocols as defined by the ITU, which include Annex A, B, and C. (Col. 1, Ln. 34-67 thru Col. 2, Ln. 1-8). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the systems of *Emsley* and *Liu* in order to provide a testing apparatus capable of receiving and demodulating signal information content that has been transmitted in accordance to ITU-T Annex A, B, and C standards.

Applicant argues that *Liu* only addresses distribution networks which utilize 6 Mhz bandwidths (i.e., Annex B). (Pg. 10, Appl. Response). However, the Examiner disagrees for a number of reasons. First, *Liu's* system is not limited to Annex B networks because the discussion at Col. 5, Ln. 34-47 only addressed Fig. 1, which is an "exemplary" embodiment (Col. 5, Ln. 16)—not the only embodiment. Secondly, at Column 5, Ln. 7-10, *Liu* teaches his system is compatible with and supports Annex A, B, and C coding formats. Thirdly, at Column 6, Ln. 51-67, *Liu* speaks specifically to an Annex A and C decoder. Lastly, although 6, 7, or 8 Mhz may be read into applicant's claims in light of the Specification, neither is claimed. Therefore, it is questionable whether Applicant's claims are limited to such an interpretation. For these reasons, the Examiner maintains the combination of *Emsley*, *Schmidt* and *Liu* disclose all limitations of Claim 2.

Claim 17 corresponds to Claim 2. Thus, it is analyzed and rejected as previously discussed.

Claim 4-6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emsley in view of Schmidt as applied to claims 1 and 10 above, and further in view of Kitamura.

Referring to claim 4, Emsley discloses a test meter of claim 3, wherein said first filter comprises a SAW filter operative to filter a first bandwidth according to a first digital standard (page 2, paragraph 24, lines 3-6 and 9-10), or said second filter comprises a SAW filter operative to filter a second bandwidth according to a second digital standard (page 2, paragraph 24, lines 6-7 and 9-10).

Emsley and Schmidt do not disclose a test meter of claim 3, wherein said first filter comprises a filter operative to filter a first bandwidth according to a first standard, and said second filter comprises a filter operative to filter a second bandwidth according to a second standard.

Kitamura discloses a test meter of claim 3, wherein said first filter comprises a filter operative to filter a first bandwidth according to a first standard, and said second filter comprises a filter operative to filter a second bandwidth according to a second standard (column 2, lines 19-28).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the multiple tuning ability taught by Kitamura to the system taught by Emsley and Schmidt. The motivation would have been to enable the tester to test two different system standards with one device (Kitamura: column 1, lines 42-44).

Referring to claim 5, Emsley discloses a test meter of claim 4, wherein said first digital standard comprises ITU-T J.83 Annex A and said second digital standard comprises ITU-T J.83 Annex B (page 2, paragraph 24, lines 1-10; Applicant's specification, page 10, lines 10-14).

Claim 14 is rejected on the same grounds as claim 5.

Referring to claim 6, Emsley discloses a test meter of claim 1, wherein the that is operative to work with a plurality of digital standards (page 2, paragraph 24, lines 1-10).

Emsley does not disclose a system wherein the user interface is operative to allow a user to select from a plurality of frequency spans; and wherein the selectable portion is made up of European and Americans standards.

Schmidt discloses a system wherein the user interface is operative to allow a user to select from a plurality of frequency spans (column 5, lines 63-67).

Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the modified system of *Emsley* with the system of *Schmidt* in order to supply a control panel in which the user could select a specific passband, thereby providing a system useful in diagnostic testing/monitoring of various digital cable systems.

Emsley and Schmidt do not disclose a system wherein the selectable portion is made up of European and Americans standards.

Kitamura discloses a system wherein the selectable portion is made up of European and Americans standards (column 2, lines 19-28).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the multiple tuning ability taught by Kitamura to the system taught by Emsley and Schmidt. The motivation would have been to enable the tester to test two different system standards with one device (Kitamura: column 1, lines 42-44).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Emsley in view of Schmidt as applied to claim 1 above, and further in view of Hessel.

Referring to claim 8, Emsley and Schmidt do not disclose a test meter of Claim 1, wherein said user interface is operative to allow a user to select one digital modulation decoding scheme from the plurality of digital demodulation decoding schemes.

Hessel discloses a test meter of Claim 1, wherein said user interface is operative to allow a user to select one digital modulation decoding scheme from the plurality of digital demodulation decoding schemes (column 4, lines 38-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the user selectable demodulation schemes taught by Hessel to the system disclosed by Emsley and Schmidt. The motivation would have been to enable a user to decode a plurality of different digital standards using a single device.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

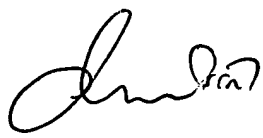
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS



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